

ABSTRACT

A wastewater treatment system for removing contaminants from wastewater on a vessel using electricity. The wastewater treatment system may inject wastewater with one or more disinfectants or ionized gases, or both, to remove at least a portion of contaminants from the wastewater. The water treatment system may produce disinfectants from saltwater using one or more disinfectant generators and return the byproducts to a water body. The wastewater treatment system may also pass wastewater through an electrical coagulation unit in which an electrical current may be emitted into the wastewater, whereby flocculants are formed and cause suspended solids and other materials to settle out of the wastewater. The wastewater treatment system may include a secondary treatment system for further reducing concentrations of contaminants. In addition, the wastewater treatment system may include a solid waste treatment system for incinerating solids produced by the wastewater treatment system.